

CHAPTER IV.

FROM "SIGNS AND WONDERS" TO LAW IN THE HEAVENS.

I. THE THEOLOGICAL VIEW.

FEW things in the evolution of astronomy are more suggestive than the struggle between the theological and the scientific doctrine regarding comets—the passage from the conception of them as fire-balls flung by an angry God for the purpose of scaring a wicked world, to a recognition of them as natural in origin and obedient to law in movement. Hardly anything throws a more vivid light upon the danger of wresting texts of Scripture to preserve ideas which observation and thought have superseded, and upon the folly of arraying ecclesiastical power against scientific discovery.*

Out of the ancient world had come a mass of beliefs regarding comets, meteors, and eclipses; all these were held to be signs displayed from heaven for the warning of mankind. Stars and meteors were generally thought to presage happy events, especially the births of gods, heroes, and great men. So firmly rooted was this idea that we constantly find among the ancient nations traditions of lights in the heavens preceding the birth of persons of note. The sacred books of India show that the births of Crishna and of Buddha were announced by such heavenly lights.† The

* The present study, after its appearance in the *Popular Science Monthly* as a "new chapter in the Warfare of Science," was revised and enlarged to nearly its present form, and read before the American Historical Association, among whose papers it was published, in 1887, under the title of *A History of the Doctrine of Comets*.

† For Crishna, see Cox, *Aryan Mythology*, vol. ii, p. 133; the *Vishnu Purana* (Wilson's translation), book v, chap. iv. As to lights at the birth, or rather at the

